



Berner Fachhochschule  
Haute école spécialisée bernoise  
Bern University of Applied Sciences

# Simplifying Student`s Life oder Wie schreibe ich meine Seminararbeit mit KI- Unterstützung?

Kerstin Denecke, Bern University of Applied Sciences



# Fallbeispiel

Für das Modul Seminar 1  
soll ich eine  
Fragestellung erstellen  
und einen  
wissenschaftlichen  
Bericht schreiben



Review article

## An overview of the features of chatbots in mental health: A scoping review

# Idee für Forschungsfrage

## Brainstorm research questions

Input

chatbots in mental health|

Clear unstarred

#

- ☆ How big is the opportunity for using AI to deliver mental health care?
- ☆ Are chatbots effective as a means to support mental health and recovery from mental health issues?
- ☆ What is the evidence base for chatbots in mental health?
- ☆ How are online mental health services currently delivered?

**How are therapists incorporating chatbots in their practice?**

- ☆ When do chatbot conversations generate effective mental health care interventions?
- ☆ What are the effects of chatbot therapy on children and adults with psychological disorders, as compared to human therapists?
- ☆ Is e-therapy as effective as in-person therapy?

Tool: <https://ide.elicit.org>

# Feedback durch ChatGPT

- ▶ Einholen von Feedback zur Fragestellung
- ▶ Erhalten von Verbesserungsvorschlägen
- ▶ **Eingabe:**
- ▶ Verhalte dich wie eine wissenschaftliche Betreuungsperson in ihrer Sprechstunde. Du musst den aktuellen Stand meiner Hausarbeit überprüfen und kritisch beurteilen. Dazu evaluierst du meine Forschungsfrage und äusserst konstruktive Kritik in Bezug auf deren Stärken und Schwächen. Die Fragestellung lautet:

**Wie binden Therapeuten Chatbots in der Behandlung ein?**

# Feedback durch ChatGPT

## Wie binden Therapeuten Chatbots in der Behandlung ein?

- ▶ [...] Zum Beispiel ist die Formulierung der Forschungsfrage **zu breit gefasst**. Es ist nicht klar, **welche Art von Therapeuten untersucht werden** sollen, **welche Art von Chatbots** untersucht werden sollen und **welche Art von Therapie** untersucht werden soll. Das Fehlen dieser spezifischen Informationen kann dazu führen, dass Ihre Studie nicht aussagekräftig genug ist und keine klaren Ergebnisse liefert.
- ▶ Zusätzlich ist es wichtig, sich bewusst zu sein, dass Chatbots in der Therapie ein **relativ neues Thema sind, und es noch wenige Studien zu diesem Thema gibt**. Es könnte schwierig sein, genügend relevante Literatur zu finden, um eine aussagekräftige Arbeit zu schreiben.
- ▶ Mein Vorschlag wäre, Ihre Forschungsfrage auf eine bestimmte Art von Therapie und Chatbot zu fokussieren. **Zum Beispiel könnten Sie untersuchen, wie Therapeuten Chatbots in der kognitiven Verhaltenstherapie einbinden oder wie sich die Nutzung von Chatbots in der Behandlung von Depressionen auswirkt.**

# Rechercheunterstützung

**Elicit**

How are therapists incorporating chatbots in cognitive behaviour therapy?

FAQTasksStarred

### How are therapists incorporating chatbots in cognitive behaviour therapy?

SUMMARY OF TOP 4 PAPERS **BETA**

The papers suggest that chatbots are being explored as a potential tool for cognitive behaviour therapy (CBT), but there are still some limitations and challenges to overcome. Bell (2019) found that participants found chatbot-provided therapy less useful, less enjoyable, and less smooth than therapy provided by human

#### Add information about all papers

Abstract summary ✓

Intervention

Outcomes measured

Search for paper information

What was the...

Has PDFFilterSort byExport as

Paper title	Abstract summary
<div>☆</div> <div><b>Perceptions of Chatbots in Therapy</b></div> <div>Samuel J Bell, C. Wood, Advait Sarkar</div> <div>CHI Extended Abstracts</div> <div>2019 18 Citations DOI</div>	Chatbot-provided therapy is less useful, less enjoyable, and their conversations are less smooth.
<div>☆</div> <div><b>Survey on psychotherapy chatbots</b></div> <div>Bei Xu, Ziyuan Zhuang</div> <div>Concurr. Comput. Pract. Exp.</div> <div>2020 6 Citations DOI</div>	Current psychotherapy chatbots can hardly replace human psychologists in the short term.
<div>☆</div> <div><b>Chatbots and Conversational Agents in Mental Health: A Literature Review</b></div> <div>Sergazy Narynov, Z. Zhumanov, Aidana Gumar, Mariyam Khas...</div> <div>International Conference on Control, Automation and Systems</div> <div>2021 Review 1 Citations DOI</div>	Chatbots are able to provide effective psychological assistance and reduce depression and anxiety in people.

Tool: <https://ide.elicit.org>

# Rechercheunterstützung

**Elicit**

[FAQ](#) [Tasks](#) [Starred](#) [User](#)

## How are therapists incorporating chatbots in cognitive behaviour therapy?

SUMMARY OF TOP 4 PAPERS BETA

The papers suggest that chatbots are being explored as a potential tool for cognitive behaviour therapy (CBT), but there are still some limitations and challenges to overcome. Bell (2019) found that participants found chatbot-provided therapy less useful, less enjoyable, and less smooth than therapy provided by human

**Add information about all papers**

Abstract summary

Intervention

**Outcomes measured** ✓

Search for paper information

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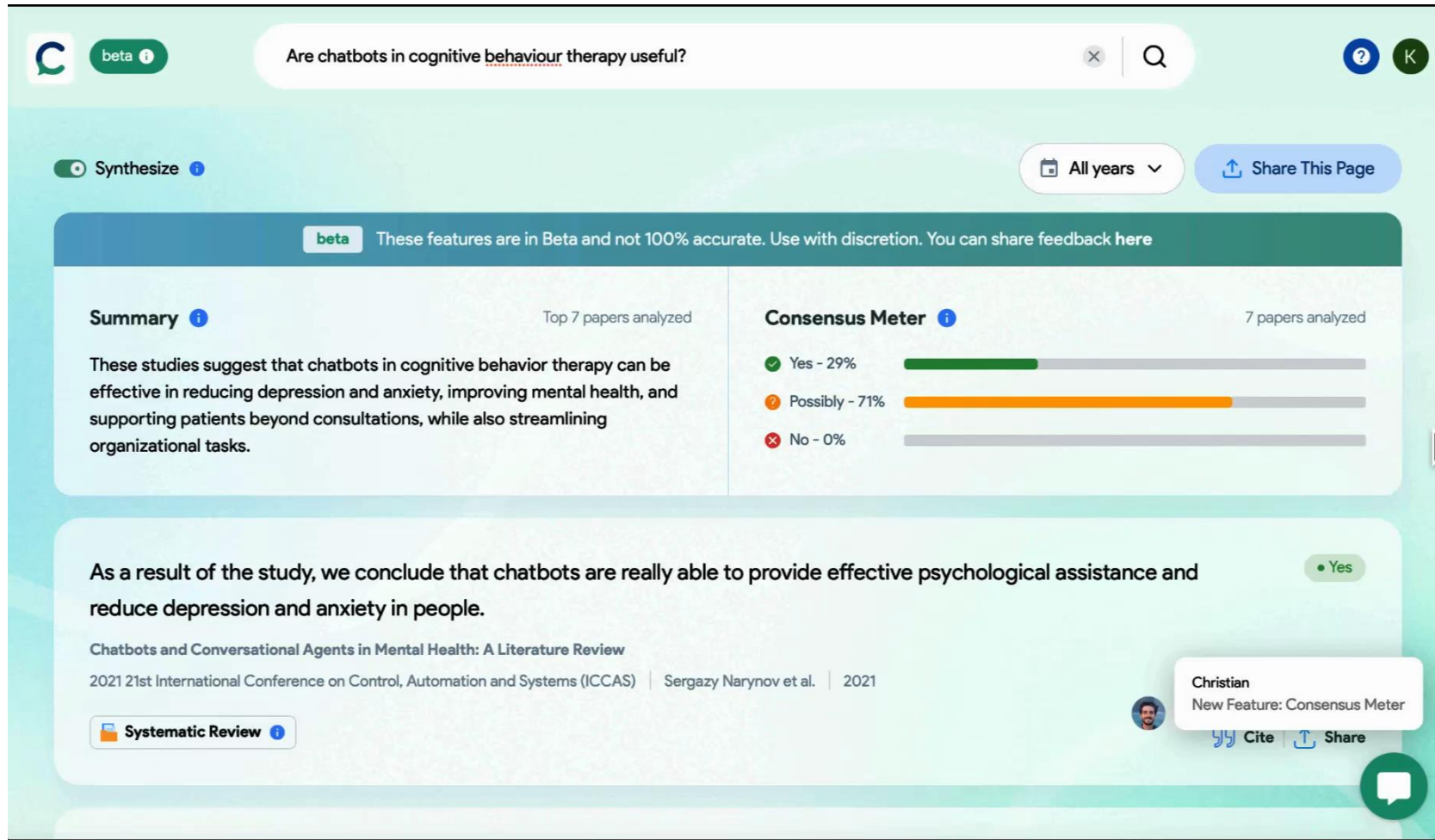
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 - Usefulness Of Therapy Sessions - Enjoyment Of Therapy Sessions - Smoothness Of Conversations During Therapy Sessions || ★ **Survey on psychotherapy chatbots** [Bei Xu, Ziyuan Zhuang](#) [Concurr. Comput. Pract. Exp.](#) 2020 6 Citations [DOI](#) |

Tool: <https://ide.elicit.org>



# Unterstützung für Belege in der Diskussion



Tool: <https://consensus.app/>



# Generieren einer Struktur und Text zum Thema

- ▶ I. Introduction
  - ▶ A. Definition of Cognitive Behaviour Therapy
    - ▶ 1. Overview of CBT
    - ▶ 2. Benefits of CBT
  - ▶ B. Definition of Chatbots
    - ▶ 1. Overview of Chatbots
    - ▶ 2. Benefits of Chatbots
- ▶ II. The Role of Chatbots in Cognitive Behavioural Therapy
  - ▶ A. How Chatbots Are Used in CBT
    - ▶ 1. Types of Chatbots
    - ▶ 2. Using Chatbots in CBT
  - ▶ B. Advantages of Chatbots in CBT
    - ▶ 1. Increased Access to Therapy
    - ▶ 2. Improved Outcomes
- ▶ III. Challenges of Using Chatbots in Cognitive Behavioural Therapy
  - ▶ A. Limitations of Chatbots
    - ▶ 1. Limitations of Artificial Intelligence
    - ▶ 2. Limitations of Access
  - ▶ B. Ethical Considerations
    - ▶ 1. Privacy of Client Data
    - ▶ 2. Professional Boundaries
- ▶ IV. Conclusion
  - ▶ A. Summary of Research
  - ▶ B. Future of Chatbots in CBT

## A. Definition of Cognitive Behaviour Therapy

### 1. Overview of CBT

Cognitive behaviour therapy is a treatment method |



Consider the suggestions generated by QuillBot:

d that focuses on changing negative patterns of thinking and behaviour in order to improve mental health. It is based on the idea that our thoughts, feelings, and behaviours are interconnected and can influence each other.

d that focuses on identifying and changing negative patterns of thinking and behaviour. It is based on the idea that our thoughts, feelings, and behaviours are interconnected and can influence each other.

d that focuses on changing negative patterns of thinking and behaviour to improve mental

II. The Role of Chatbots in Cognitive Behavioural Therapy

Tool: Quillbot – Co-Writer

# Abgabe der Arbeit



## Chatbots in der kognitiven Verhaltenstherapie

Potenziale und Grenzen im Einsatz

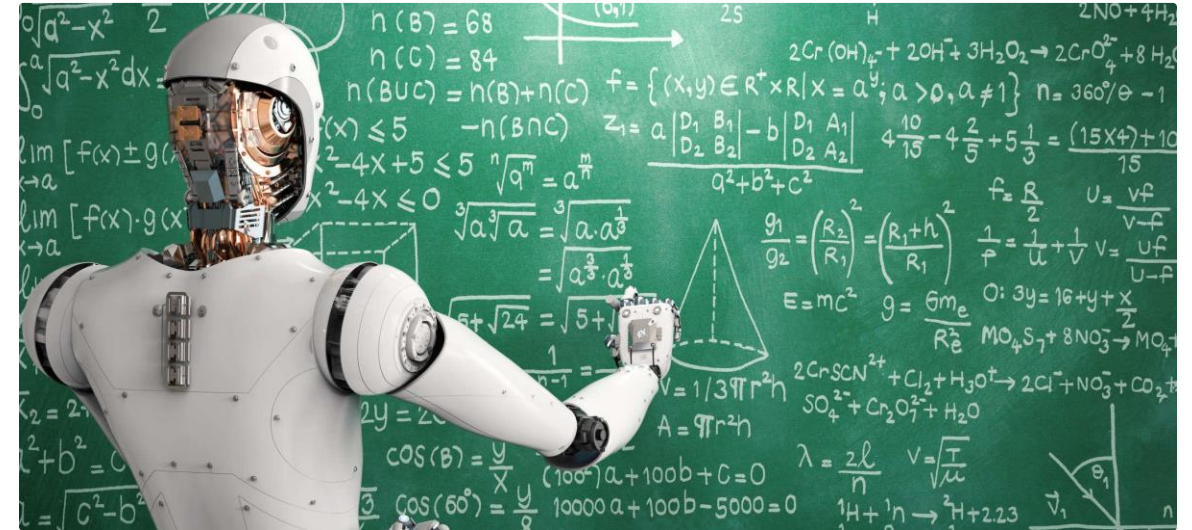
Studiengang: Medizininformatik  
Autor: Engagierte Studentin  
Betreuerin: Prof. Dr. Kerstin Denecke  
Datum: 08.Mai 2023

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# Künstliche Intelligenz in der Lehre



Simplifying Student`s Life?



Complicating Lecturer`s Life?

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